

REMARKS

Claims 1, 4, 17, 20, 30, 33, 42, and 45 have been amended to clarify the invention. Claims 1-45 remain pending.

The Examiner rejected claims 1, 3, 14-17, 19, 28-30, 32, 41-42, and 44 under 35 U.S.C. 102(e) as being anticipated by Tsuchiya et al. (U.S. patent 6,690,669). The Examiner further rejected claims 2, 4-8, 18, 20-24, 31, 33-37, 43, and 45 under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya in light of Tobagi et al. (U.S. pub. 2002/0080721). It is respectfully submitted that the Examiner (on page 11 of the Office Action) states that claims 9-13, 25-27, and 38-40 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Examiner's rejections are respectfully traversed as follows:

Claim 1 is directed towards a method for "avoiding problems associated with protocol translation." By way of example, problems with converting between IPv4 and IPv6 may be avoided by practicing embodiments of the present invention. Claim 1 also requires "determining information related to converting data from a first protocol to a second protocol" and "modifying a protocol parameter of a first data based on the determined information" in order to avoid "problems associated with a second data sent after the first data." That is, problems associated with second data that is sent after the first data are avoided by modifying a protocol parameter of previously sent first data. The problems of the second data are "related to a change in a size of the second data that may result from converting the second data from the first to the second protocol." Thus, the protocol parameter of the first data is modified to avoid problems of a subsequently sent second data that relate to a change in size of the second data that may result from protocol conversion. Independent claims 17, 30, and 42 include mechanisms for "modifying a protocol parameter of a first data based on the determined information" in order to avoid "problems associated with a second data sent after the first data", where the problems of the second data are "related to a change in a size of the second data that may result from converting the second data from the first to the second protocol."

Embodiments of the present invention allow avoidance of problems related to a change in size that may occur when data is converted from one protocol to another. Problems related to data size changes during protocol conversion may include, but are not limited to, fragmentation, retransmission, and dropping of data. In particular, embodiments of the present invention includes mechanisms for modifying a protocol parameter of a first data to avoid problems associated with size changes that may results from a protocol conversion of a subsequently sent second data. For example, the protocol parameter of the first data may be a window size limit

that is modified to a lower value so as to cause a subsequently sent second data sent by a host to have a reduced data size prior to a protocol translation. Thus, the increase in the second data's size after translation is less likely to then result in a size that exceeds the original, unmodified window size.

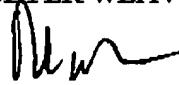
The cited reference Tsuchiya is relevant in that it is directed towards a method of avoiding accelerated exhaustion of the IPv4 address space by devices that convert data from the IPv4 protocol to the IPv6 protocol. (See column 2, lines 43-48.) Although Tsuchiya does address a "problem related to converting data from a first to a second protocol," Tsuchiya fails to address problems that arise when the conversion process for data between the two protocols changes the size of the data, in the manner claimed. Since Tsuchiya fails to teach or suggest mechanisms for modifying a protocol parameter of a first data to avoid problems related to a change in a size of subsequently sent second data that may result from converting the second data from the first to the second protocol, in the manner claimed, it is respectfully submitted that amended claims 1, 17, 30, and 42 are patentable over Tsuchiya.

The Examiner's rejection of the remaining dependant claims are likewise respectfully traversed. In order to expedite prosecution, all of the claims will not be argued separately. These claims all depend directly or indirectly from independent claims 1, 17, 30, and 42, and therefore, are submitted to be patentable over Tsuchiya for at least the reasons set forth above with respect to independent claims 1, 17, 30, and 42.

The cited secondary reference Tobagi discloses a rate control module for use in TCP-based communications networks. Compared to the prior art, the Tobagi rate control module reduces the frequency of dropped packets in a network by changing various packet size variables and other parameters in response to dropped packets. (See page 3, paragraph 0037; page 4, paragraph 0044.) Independent claims 1, 17, 30, 42, and their dependents, are not obvious in view of Tobagi and Tsuchiya in light of Tobagi for two reasons. First, the combination of Tsuchiya and Tobagi does not disclose or suggest a solution to problems created by size changes in subsequently sent data that may result from protocol conversion. Second, the Tobagi rate control module reduces the frequency of dropped packets by acting in response to dropped packets. (See page 4, paragraphs 0042 and 0043.) Tobagi, and the combination of Tobagi in light of Tsuchiya, do not disclose or suggest the adjustment of a data size protocol parameter of a first data so as to avoid problems related to a data size change that may result from protocol translation of a subsequently sent second data, in the manner claimed. Because the combination fails to teach or suggest such features in the manner claimed, it is respectfully submitted that all pending claims are also patentable over Tobagi and Tsuchiya in light of Tobagi.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP


Mary Ramos Olynick
Reg. 42,963

P.O. Box 70250
Oakland, CA 94612-0250
(510) 663-1100